

Exploring Motion

1-5 The student will demonstrate an understanding of the positions and motions of objects. (Physical Science)

1-5.4 Illustrate ways in which objects can move in terms of direction and speed (including straight forward, back and forth, fast or slow, zigzag, and circular).

Taxonomy level: 2.2-B Understand Conceptual Knowledge

Previous/Future knowledge: This is a foundational concept that students will develop further in future grades. In 3rd grade (3-5.3), students will explain how the motion of an object is affected by the strength of a push or a pull and will begin to investigate the effect of gravity on the motion of an object (3-5.4).

It is essential for students to know how objects can move. The movement can be illustrated in terms of:

Direction

- The way or path that an object takes as it moves, such as straight forward, back and forth, zigzag, and circular.

Speed

- The pace or rate in which an object moves, such as fast or slow.

These movements are compared to the starting position before the object is moved.

It is not essential for students to explain how a change in the strength of the push or pull will affect the object.

Assessment Guidelines:

The objective of this indicator is to *illustrate* ways in which objects can move in terms of direction and speed; therefore, the primary focus of assessment should be to give specific examples through the use of pictures or words. However, appropriate assessment should also require students to *recall* how objects can move; or *compare* the movement of one object with another object.